IN THE CLAIMS:

The text of all pending claims are set forth below. Cancelled and withdrawn claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (previously presented), (cancelled), (withdrawn), or (new).

Please AMEND the claims in accordance with the following:

1. (Currently Amended) A dialogue processing system for performing a natural language dialogue with a user, comprising:

a predetermined number of slots, each said slot being a storage area for storing one predefined information item which is required to achieve an aim of one dialogue;

an analyzer extracting information corresponding to said information item from information entered by a certain user in said one dialogue and storing the extracted information in the slot for the information item; and

a response processor determining whether said one dialogue is completed based on whether all of said information items required to achieve said aim of said one dialogue have been stored into all of said predetermined number of slots, and outputting response information to said certain user in accordance with an information storage state of said slots, and

where progress of said one dialogue is controlled based on said information storage state of said predetermined number of slots without using any dialogue sequence definition.

2. (Previously Presented) The dialogue processing system as set forth in claim 1, further comprising:

a knowledge base relating to said dialogue with said user; and

a knowledge base processor extracting information corresponding to information items required to achieve said aim of said one dialogue with said certain user by using information stored in said slots and information stored in said knowledge base and storing the extracted information in the slot for the required information item.

3. (Previously Presented) The dialogue processing system as set forth in claim 1, further comprising:

a knowledge base relating to said dialogue with said user; and

means for checking whether there is inconsistency between information stored in said slots and information stored in said knowledge base by using said information stored in said slots and said information stored in said knowledge base.

4. (Previously Presented) The dialogue processing system as set forth in claim 1, wherein said information entered by said certain user in said one dialogue is a sentence in natural language, and

wherein said analyzer comprises:

means for performing morpheme analysis for said sentence;

means for performing parsing processing for results of said morpheme analysis; and

means for extracting information corresponding to the information item based on the results of said morpheme analysis and said parsing processing by using an extraction rule pre-defined to achieve said aim of said one dialogue.

5. (Previously Presented) The dialogue processing system as set forth in claim 1, further comprising:

a knowledge base relating to said dialogue with said user;

means for determining whether information stored in said knowledge base is necessary to be updated if all said information items required to achieve said aim of said one dialogue with said certain user are stored in all of said predetermined number of slots; and

means for updating said knowledge base in accordance with a predetermined rule if it is determined that said information stored in said knowledge base is necessary to be updated.

6. (Previously Presented) The dialogue processing system as set forth in claim 1, wherein said response processor comprises:

a response information storage device for storing response information for said user in correspondence with said information storage state of said slots; and

means for determining said information storage state of said slots and for acquiring and outputting response information for said certain user in correspondence with said information storage state of said slots from said response information storage device.

7. (Previously Presented) The dialogue processing system as set forth in claim 1, wherein said information entered by said certain user in said one dialogue is voice information entered in natural language, and

wherein said dialogue processing system further comprises:

a voice recognition processor for converting said voice information into character information; and

a voice synthesis processor for converting said response information into voice information.

8. (Previously Presented) The dialogue processing system as set forth in claim 1, wherein, in accordance with said information storage state of said slots, said response processor outputs response information for requesting said certain user to enter information items that are required to achieve said aim of said one dialogue.

9. (Currently Amended) A storage medium for storing a program for processing a natural language dialogue with a user, said program configured to perform a process, the process comprising:

ensuring a predetermined number of slots on a storage device, each said slot being a storage area for storing a predefined information item which is required to achieve an aim of one dialogue;

extracting information corresponding to said information item from information entered by a certain user in said one dialogue and storing the extracted information in the slot for the information item; and

determining whether said one dialogue is completed based on whether all of said information items required to achieve said aim of said one dialogue have been stored into all of

said predetermined number of slots, and outputting response information to said certain user in accordance with an information storage state of said slots, and

where progress of said one dialogue is controlled based on said information storage state of said predetermined number of slots without using any dialogue sequence definition.

10. (Previously Presented) The storage medium as set forth in claim 9, said process further comprising:

extracting information corresponding to information items required to achieve said aim of said one dialogue with said certain user by using information stored in said slots and information stored in a knowledge base relating to said dialogue with said user; and

storing the extracted information in the slot for the required information item.

11. (Previously Presented) The storage medium as set forth in claim 9, said process further comprising:

checking whether there is inconsistency between information stored in said slots and information stored in a knowledge base relating to said dialogue with said user by using said information stored in said slots and said information stored in said knowledge base.

12. (Previously Presented) The storage medium as set forth in claim 9, wherein said information entered by said certain user in said one dialogue is a sentence in natural language, and wherein said extracting comprises:

performing morpheme analysis for said sentence;

performing parsing processing for results of said morpheme analysis; and

extracting information corresponding to the information item based on the results of said morpheme analysis and said parsing processing by using an extraction rule pre-defined to achieve said aim of said one dialogue.

13. (Previously Presented) The storage medium as set forth in claim 9, said process further comprising:

determining whether information stored in a knowledge base relating to said dialogue with said user is necessary to be updated if all said information items required to achieve said aim of said one dialogue with said certain user are stored in all of said predetermined number of slots; and

updating said knowledge base in accordance with a predetermined rule if it is determined that said information stored in said knowledge base is necessary to be updated.

14. (Previously Presented) The storage medium as set forth in claim 9, wherein said determining and outputting comprises:

determining said information storage state of said slots; and

acquiring and outputting response information for said certain user in correspondence with said information storage state of said slots from a response information storage device for storing response information for a user in correspondence with said information storage state of said slots.

15. (Previously Presented) The storage medium as set forth in claim 9, wherein said information entered by said certain user in said one dialogue is voice information entered in natural language, and

wherein said process further comprises:

converting said the voice information into character information; and

converting said response information into voice information.

16. (Previously Presented) The storage medium as set forth in claim 9, wherein, in accordance with said information storage state of said slots, said outputting comprises outputting response information for requesting said certain user to enter information items that are required to achieve said aim of said one dialogue.

17. (Currently Amended) A method for processing a natural language dialogue with a user, said method comprising:

ensuring a predetermined number of slots on a storage device, each said slot being a storage area for storing a predefined information item which is required to achieve an aim of one dialogue;

extracting information corresponding to said information item from information entered by a certain user in said one dialogue and storing the extracted information in the slot for the information item; and

determining whether said one dialogue is completed based on whether all of said information items required to achieve said aim of said one dialogue have been stored into all of said predetermined number of slots, and outputting response information to said certain user in accordance with an information storage state of said slots, and

where progress of said one dialogue is controlled based on said information storage state of said predetermined number of slots without using any dialogue sequence definition.

18. (Previously Presented) The method as set forth in claim 17, further comprising:

extracting information corresponding to information items required to achieve said aim of said dialogue with said certain user by using information stored in said slots and information stored in a knowledge base relating to said dialogue with said user; and

storing the extracted information in the slot for the required information item.

19. (Previously Presented) The method as set forth in claim 17, further comprising:

checking whether there is inconsistency between information stored in said slots and information stored in a knowledge base relating to said dialogue with said user by using said information stored in said slots and said information stored in said knowledge base.

20. (Previously Presented) The method as set forth in claim 17, wherein said information entered by said certain user in said one dialogue is a sentence in natural language, and

wherein said extracting comprises:

performing morpheme analysis for said sentence;

performing parsing processing for results of said morpheme analysis; and

extracting information corresponding to the information item based on the results of said morpheme analysis and said parsing processing by using an extraction rule pre-defined to achieve said aim of said one dialogue.

21. (Previously Presented) The method as set forth in claim 17, further comprising:

determining whether information stored in a knowledge base relating to said dialogue with said user is necessary to be updated if all said information items required to achieve said aim of said one dialogue with said certain user are stored in all of said predetermined number of slots; and

updating said knowledge base in accordance with a predetermined rule if it is determined that said information stored in said knowledge base is necessary to be updated.

22. (Previously Presented) The method as set forth in claim 17, wherein said determining and outputting comprises:

determining said information storage state of said slots; and

acquiring and outputting response information for said certain user in correspondence with said information storage state of said slots from a response information storage device for storing response information for a user in correspondence with said information storage state of said slots.

23. (Previously Presented) The method as set forth in claim 17, wherein said information entered by said certain user in said one dialogue is voice information entered in natural language, and wherein said method further comprises:

converting said the voice information into character information; and

converting said response information into voice information.

24. (Previously Presented) The method as set forth in claim 17, wherein, in accordance with said information storage state of said slots, said determining and outputting comprises outputting response information for requesting said certain user to enter information items that are required to achieve said aim of said one dialogue.

25. (Currently Amended) A method of processing a natural language dialogue with a user, the method comprising:

providing a predetermined dialog objective, the predetermined dialog objective comprising a set slots of information, each slot comprising a specific field of information that needs to be filled to complete the dialog objective;

preparing or selecting natural language prompts to be presented to the user, where the prompts are prepared or selected based on which slots have filled fields and which do not; and

receiving sentence-like natural language responses to the natural language prompts and, for each response, using natural language processing to automatically extract one or more fields of information that the user intended to convey with the response, where, for at least one received response, two different fields are extracted and determined to correspond to slot fields, where at least one of the extracted fields was supplemental information volunteered from the user without having been previously specifically prompted for by a prompt prepared or selected to be presented to the user, whereby progress of the natural language dialogue is controlled based on the information storage state of the predetermined number of slots without reference to any dialogue sequence definition.

26. (Previously Presented) A method according to claim 25, further comprising:

allowing a dynamic order of presenting the prompts to the user.

27. (Previously Presented) A method according to claim 25, further comprising:

given a slot previously mentioned during the dialog, allowing the user or a system preparing the prompts to use a pronoun to refer to the previously mentioned slot, where, for some later response having the pronoun, the system automatically determines which slot is referred to by the pronoun in the later response.

28. (Previously Presented) A method according to claim 25, further comprising:

automatically determining that the dialog objective has been met when all of the slot fields are filled.